

## DialogIP

**FUSED MUTS PROTEIN AND ITS PRODUCTION**

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**International Class (IPC Edition 6):**C07K-014/435  
C12N-001/21  
C12N-015/09  
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C12N-001/21  
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C12R-001/19**JAPIO Class:**14.1 (ORGANIC CHEMISTRY--- Organic Compounds)  
14.5 (ORGANIC CHEMISTRY--- Microorganism Industry)  
46.2 (INSTRUMENTATION--- Testing)**Abstract:**

**PROBLEM TO BE SOLVED:** To obtain a new fused protein having high reactivity with mismatched double stranded DNA and useful for detection of spot mutation of DNA by the combination of N terminal of MutS protein with a segment of N terminal side of N protein of lamda phage.

**SOLUTION:** This new protein has the sequence of the formula and prepared by the combination of N terminal of MutS protein with a segment of N terminal side of N protein of lamda phage. This protein is highly reactive with mismatched double stranded DNA and useful for detecting spot mutation of DNA namely for the detection of the mismatched region of the double stranded DNA. This fused MutS protein is obtained by sampling the DNA from the restriction enzyme treated vector comprising the DNA coding the MutS protein, combining the terminal of N side with a synthetic DNA coding the segments of 1-33th amino acids of N terminal side of lamda phage N protein and integrating this into the vector, introducing to a host cell allowing the manifestation of the structural gene.